Module 2 - Analytics strategy and design based on a solution design reference

This toolkit is designed for <u>Professional Developer Exam Aspirants</u>. There are **six** Modules. Study Each module per week to stick to schedule. Technical Parts of applications are depicted in Videos, you can learn more about them from experience League. You can visit <u>Get prep page</u> to understand the contents and anticipate the learning journey.

This is Professional Exam, Developer toolkit Module 2. This module contains three sections.

2.1 Analytics tutorials

Get the most out of Adobe Analytics. Use these tutorials to learn the features of Analytics and reap the benefits for your business. This content is suitable for administrators, data analysts, marketers, developers, and architects.

To get started,

- See the "What's New" section below for the latest updates and features
- Staff Picks highlights some of our favorite content
- Explore the content by topic and subtopic in the left navigation
- Use the **search** field at the top of the page if you know what you want to learn

Curated learning experiences by role and skill level are also offered in the courses section. Simply sign-in with your Adobe ID and navigate to Learn > Recommended courses in the top navigation.

Introduction to Analytics

What is analytics?

Before you immerse yourself into the content to learn Adobe Analytics, it's helpful to understand the answer to this fundamental question, "What is Analytics?" Analytics is a broad term that encompasses multiple disciplines for driving business development and transformation, namely business, and data analytics. There is a distinction between the two. Let's have a closer look.

The role of business analytics

In recent years, the birth and maturity of using the internet for commercial purposes has exploded, and so has the amount of data amassed by organizations about how consumers interact and engage in their brand. If you've heard the term Big Data before, this falls into the realm of business analytics.

Business analytics is a component of business intelligence and focuses on big-picture strategic risks and opportunities. It's a necessary capability that companies must possess to remain competitive in their industry.

There are four types of business analytics:

- **Descriptive**: This involves using historical data to identify trends in an organization's business. For example, a retailer needs to predict product demand before peak or Holiday seasons and requires optimal inventory to achieve its business goals.
- **Diagnostic**: What are the reasons behind an unexpected outcome? Why was there a dramatic demand for a product or service during the off-peak season? Diagnostic analysis is a deeper form of descriptive analysis and aims to draw correlations from the data.
- **Predictive**: This uses historical data to determine probable outcomes or events. Machine learning (ML) and artificial intelligence (AI) are commonly used for more accurate predictions. Customer churn is an example of a real-world application of predictive analysis. This analysis finds correlations to identify the attributes of customers who are likely to churn so that you can do something to prevent it.
- **Prescriptive**: This is an advanced form of predictive analysis that aims to uncover the best possible path to a desired outcome. This type of analysis uses ML and AI technologies as well. Retailers use prescriptive analysis to improve margins by making changes in their operations.



Four types of data analytics

Adobe

The role of data analytics

Data analytics uses many of the same technologies used in business analytics, but it's broader in scope and more technical in nature. Big data analysis, for example, relies on the quality and organization of data. How effectively is the data sorted, stored, and cleansed? Data scientists work in the realm of data analytics. They transform massive data sets that business analysts then use to communicate information to the organization to optimize processes and metrics. Data scientists take deeper dives into the data, determining trends and connections.



Where does Adobe Analytics fit?

Adobe Analytics is a robust data analysis platform that collects data from multi-channel digital experiences that support the customer journey and provides tools for analyzing the data. It's a platform commonly used by marketers and business analysts for business analytics purposes.

Business requirements, data design, and data collection are key factors for an effective analytics practice. Initially, customers start with collecting data about key customer journeys and desired business outcomes for traditional digital experiences, like web and mobile. The data should answer questions like:

- "Which content and content types are popular with visitors?"
- "Which paths result in high-value conversions, such as revenue, bookings, leads, or subscriptions?"

• "Which products, services or content should I show to known and unknown visitors"?

Project	Requirements							
ID	Category	Business Requirement	Dependent on Data Layer Developmen*2	Data Layer Element Needed	Requires additional data layer work X = Yes ? = TBD	eVar(s) used	event(s) used	prop(s) used
100	Basic Traffic							
101	Basic Traffic	Ability to report on all web and mobile properties	Y	n/a				
102	Basic Traffic	Ability to report at hour, day, week, month, and year level, as well as record a time stamp for when the server call occurs.	N	n/a		eVar23		
103	Basic Traffic	Collect page views, visits, and unique visitors (unique at day, month, and all level)	N	n/a				
104	Basic Traffic	Assign a friendly, clear, concise, and contextual page name according to content identification best practices	Y	page_id		eVar19		pageName
200	External Campaigns							
201	External Campaigns	Understand which external paid and non-paid Marketing channels [TV, print, radio, social, display, paid search, SEO, etc.] are most effective at generating the most traffic and site successes. Use a 30 day persistence window.	N	utm_query string parameters		campaign		
202	External Campaigns	Be able to role multiple campaign tracking codes into a single channel or "bucket" for ease-of- reporting purposes	N	n/a		marketing channels		
400	Internal Search							
401	Internal Search	Track and report on most popular user-entered internal search terms	Y	search_keyword		eVar5	event1	prop5
402	Internal Search	Report on internal search keywords with zero results - allows content managers to create content for terms users are searching	Y	search_results			event2	
800	Products							
801	Products	Ability to report on each product individually and in total by capturing unique SKUs	Y	product_sku		s.products		
802	Products	Be able to upload offline metadata about a particular products to the system for an additional view of conversion	N	n/a		classifications on s.products		
803	Products	Ability to report revenue paid at the time of purchase by product at the SKU level as well as the offline metadata uploading via SAINT classifications.	Y	product_list_price multiplied by product_quantity		s.products, classifications on s.products	revenue	
804	Products	Be able to report on the number of sessions (visits) in which a product view has occurred.	Y	use the combination of page_type and product_sku			event8	
805	Products	Capture the number of times a particular product was viewed through a modal (or quick view)	Y	event_name = quick view + product_sku + WTB Page PDP View		s.products	event9	
806	Products	Capture the number of times a particular product was viewed through a product detail page	Y	use the combination of page_type and product_sku		s.products	prodView, event10	

• "How are digital marketing channels performing?"

Once the data foundation is collected into Adobe Analytics, marketers and business analysts use various reports and data visualization tools available in the product to perform analysis and tell meaningful stories about the data. Moreover, Adobe Analytics provides various forms of outputs. It could be a segment or audience that is sent to an optimization tool, like Adobe Target, to run A/B tests. It could be a predictive score to indicate the likelihood of an action by a person that is used by another system for modeling.



Over time, customers enrich traditional web and mobile data with other channel sources, including CRM, call center, brick and mortar, voice assistants, and more. Adobe Analytics offers

multiple ways to capture data from virtually any channel source to build a robust analytics data foundation.

Collecting additional datasets opens the door to performing more advanced types of prescriptive data analysis that use machine learning or advanced data models, such as marketing attribution and anomaly detection.

We encourage you to engage with the tutorials on Experience League to guide you through the key benefits and capabilities of Adobe Analytics.

- Analysis Workspace
- Administration
- Implementation
- <u>Components</u>
- Additional Tools
- Exporting
- Integrations
- Data Science
- <u>Vertical-Specific</u>
- Media Analytics
- **Mobile App Analytics**
- <u>APIs</u>
- Analysis Use Cases

2.2 Implement Adobe Analytics

Adobe requires code on your site or app to send data to Adobe's data collection servers. The following steps indicate how a typical implementation works.

1. When a visitor comes to your site, a request is made to your web server.

- 2. Your site's web server sends the page code information, and the page displays in the browser.
- The page loads, and the Analytics JavaScript code runs. The JavaScript code sends an image request to Adobe data collection servers. Page data that you defined in your implementation are sent as part of a query string in this image request.
- 4. Adobe returns a transparent pixel image.
- 5. Adobe servers store collected data in one or more *report suites*.
- 6. Report suite data populates the reports that you can access in a web browser.

The JavaScript code execution occurs quickly and does not noticeably affect page load times. This approach allows you to count pages that were displayed when a visitor clicked **Reload** or **Back** to reach a page, because the JavaScript runs even when the page is retrieved from cache.

Adobe Analytics requires code within your website, mobile app, or other application to send data to data collection servers. There are several methods to implement this code, depending on platform and your organization's needs.

Website implementation methods

For your website, the following implementation methods are available:

 Web SDK extension: The standardized and recommended method to implement Adobe Analytics for new customers. Install the Adobe Experience Platform Web SDK extension in Adobe Experience Platform Data Collection Tags, use a loader tag on each page, and send data to Adobe Experience Platform Edge Network in a format convenient to your organization. The Edge Network forwards incoming data to Adobe Analytics in the correct format.



See <u>How to implement Adobe Analytics using the Adobe Experience Platform</u> <u>Web SDK extension.</u> for more information.

• Web SDK: You can manually load the Web SDK libraries on your site if you do not want to use Adobe Experience Platform Data Collection. Reference the Web SDK library (alloy.js) on each page, and send the desired tracking calls to the Adobe Experience Platform Edge Network in a format convenient to your organization. The Edge Network forwards incoming data to Adobe Analytics in the correct format.



See <u>How to implement Adobe Analytics using the Adobe Experience Platform</u> <u>Web SDK</u> for more information.

 Analytics extension: Install the Adobe Analytics extension in Adobe Experience Platform Data Collection Tags. Place a loader tag on each page, and use the Adobe Analytics extension to determine how each variable is defined. Use this implementation method if you do want the convenience of Tags, but not want to use the Edge Network infrastructure.



See <u>How to implement Adobe Analytics using the Analytics extension</u> for more information.

• Legacy JavaScript: The historical manual method to implement Adobe Analytics. Reference the AppMeasurement library (AppMeasurement.js) on each page and then outline variables and settings used in an implementation.

Legacy JavaScript		
// manually laad AppHeasurement library (AppHeasurement.js) <pre>curigt.srcvMapHeasurement.js^c/scrlpD</pre>		
<pre>// Instantiate the Analytics tracking object with report suite ID var s_account = "examplersid"; var sts_gf(c_account);</pre>		
<pre>// Hake sure data is sent to the correct location s.trackingServer = "example.data.adobedc.net";</pre>	· · · · · ·	
// simplified data layer s.pageime = "Example arga"; s.eHari = "Example arga"; s.eHari = "Example arga"; s.eHari = "Example arga";		Analytics
// send data to Adube Analytics s.tD:		

This implementation method can be useful for implementations using custom code and is still recommended when you (want to) use:

• activity map data,

INFO

Using the latest Web SDK, Activity Map is supported. See <u>Enable Activity</u> <u>Map</u> for more information.

- streaming media measurement,
- livestream API or livestream triggers,
- AMP page tracking

See <u>Implement Adobe Analytics with AppMeasurement for JavaScript</u> for more information.

The following decision flow might help you select an implementation method:



TIP

Please contact Adobe for advice and best practices on which implementation to choose based on your current situation.

Mobile app implementation methods

For your **mobile app**, the following implementation methods are available:

• **Mobile SDK extension**: The standardized and recommended method to implement Adobe Analytics in your mobile app. Use dedicated libraries to easily send data to Adobe from within your mobile app. Install the **Adobe Experience**

Platform Mobile SDK extension in Adobe Experience Platform Data Collection **Tags** and implement the correct code in your app to import libraries, register extensions and load the tag configuration. This sends data to Adobe Experience Platform **Edge Network** in a format convenient to your organization. Experience Edge forwards incoming data to Adobe Analytics in the correct format.



See Implement Adobe Analytics using the Adobe Experience Platform Mobile SDK for more information.

• Analytics extension: Install the Adobe Analytics extension in Adobe Experience Platform Data Collection **Tags**, and implement the correct code in your application to import libraries, register extensions and load the tag configuration. Use the Analytics extension to determine how each variable is defined. Use this implementation method if you do want the convenience of Adobe Experience Platform Data Collection, but not want to use Adobe's Experience Platform Edge network infrastructure.



See Implement Adobe Analytics using the Analytics extension for more information.

- <u>Analytics Release Notes</u>
- <u>AppMeasurement release notes</u>
- Analytics variables, functions, and methods
- Prepare to implement Adobe Analytics
- <u>Implement Analytics using Experience Platform</u> <u>Edge</u>

- Implement Analytics using the Adobe Analytics extension
- **Implement Analytics using JavaScript**
- Implement Analytics on other platforms
- Implement Analytics on mobile devices
- Implementation use cases
- Validate your implementation
- Frequently asked questions
- <u>Review your implementation</u>

2.3 Analytics Admin Guide

Adobe Analytics currently has two areas for administrators:

- Adobe Admin Console: Use this area for provisioning Experience Cloud tools, and managing user permissions. It is located at <u>adminconsole.adobe.com</u>.
- Analytics Admin Tools: Use this area for report suite and variable management. It can be accessed by clicking Admin in the top header of Adobe Analytics.

This guide covers:

- All tasks that are done in Analytics Admin Tools. This area includes setting up report suites, variables, classifications, or data governance. See <u>Admin Tools</u> for a list of report suite and company settings available.
- All Analytics-specific tasks that are done in the Adobe Admin Console. This area includes product provisioning and user permission management. See <u>Adobe</u> <u>Analytics in the Adobe Admin Console</u> for a list of actions that can be done in the Adobe Admin Console.

This guide does not cover many of the generic capabilities that the Adobe Admin Console offers. Instead, see <u>Admin Console</u> in the Enterprise user guide.

- <u>Analytics Release Notes</u>
- Adobe admin console
- Analytics admin tools

• Admin API